

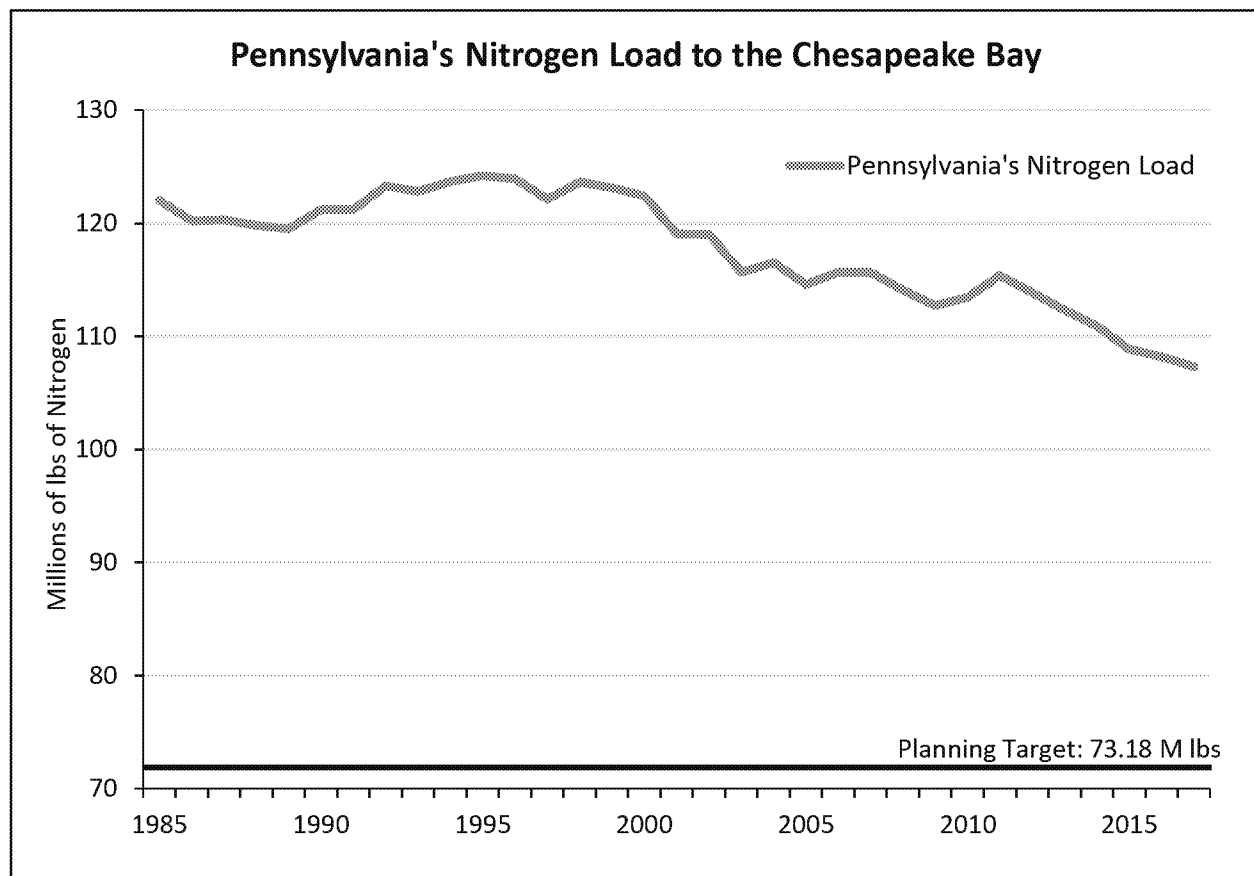
***COUNTY PLANNING and PROGRESS***  
**Working Together for Clean Water In Pennsylvania**



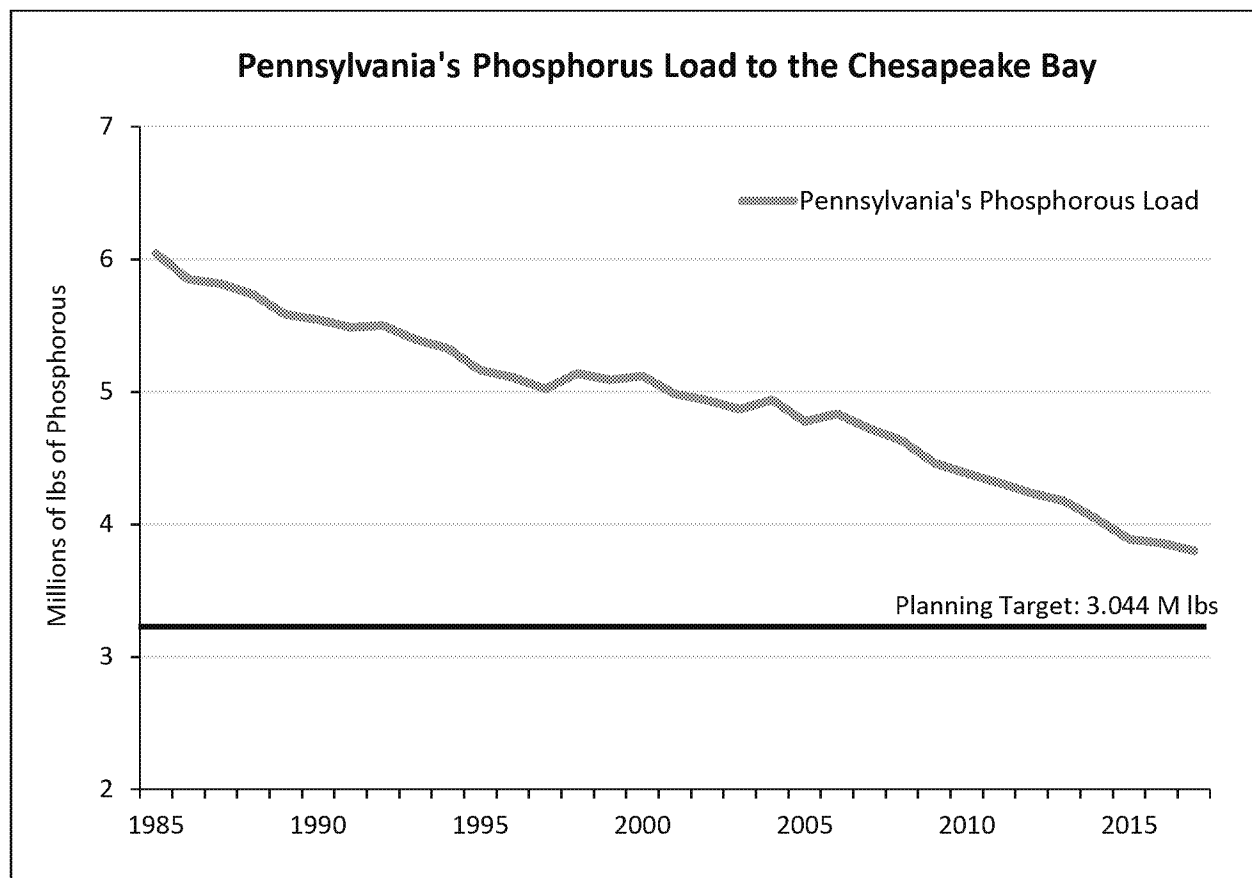
***Healthy Waters, Healthy Communities***

***March 2019***

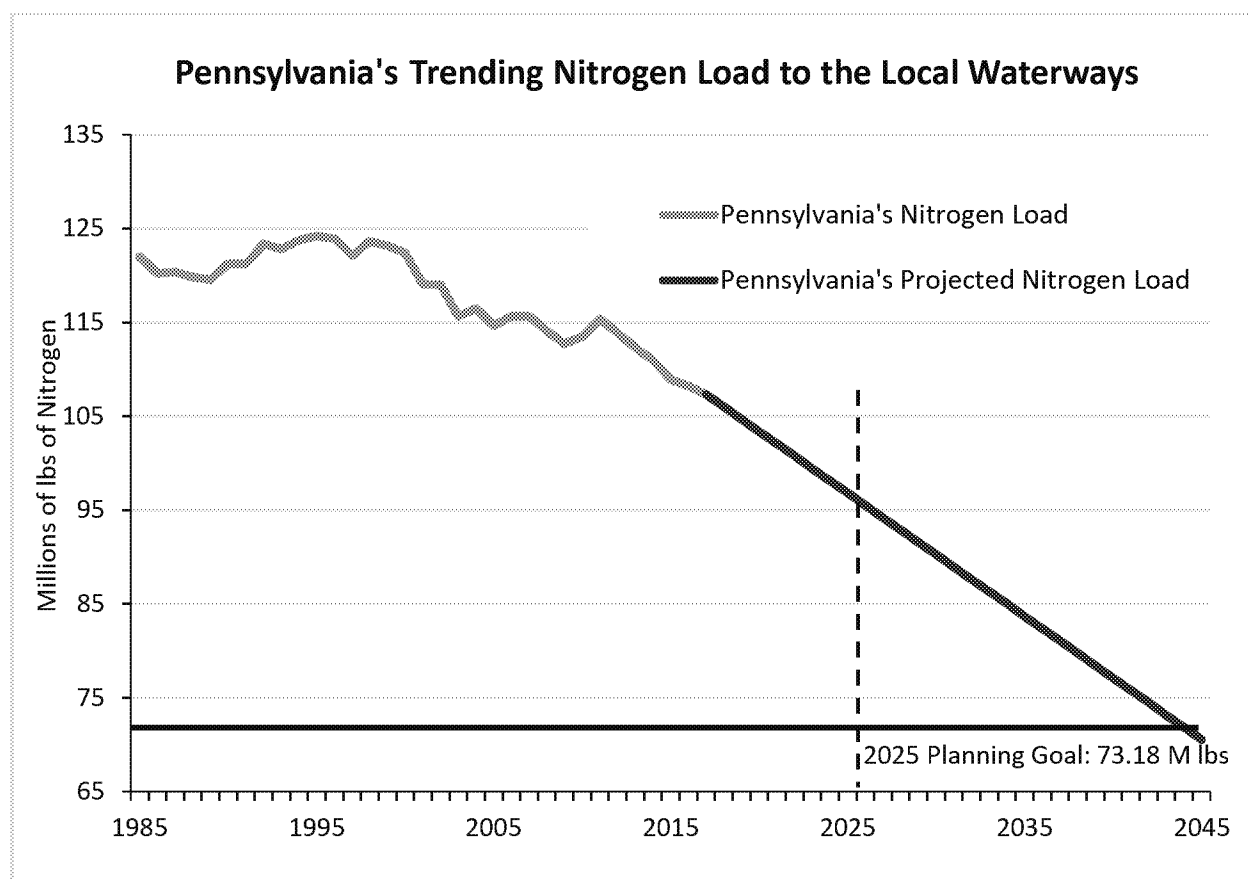




The graph above shows data for nitrogen delivery from Pennsylvania to the Chesapeake Bay between 1985 and 2025. Load numbers from 1985 to 2017 reflect annual load measurements. Load numbers from 2018 to 2015 are model projections based on current/planned actions and future conditions. In 1985, 122.02 M lbs of nitrogen flowed from PA to the Bay. By 2017, that amount had dropped by 14.71 M lbs of nitrogen to an annual loading rate of 107.31 M lbs of nitrogen. Current efforts should continue to reduce this number. It is expected that by 2025, Pennsylvania will decrease the annual load of nitrogen to 73.18 M lbs (an additional reduction of 34.13 M lbs of nitrogen).

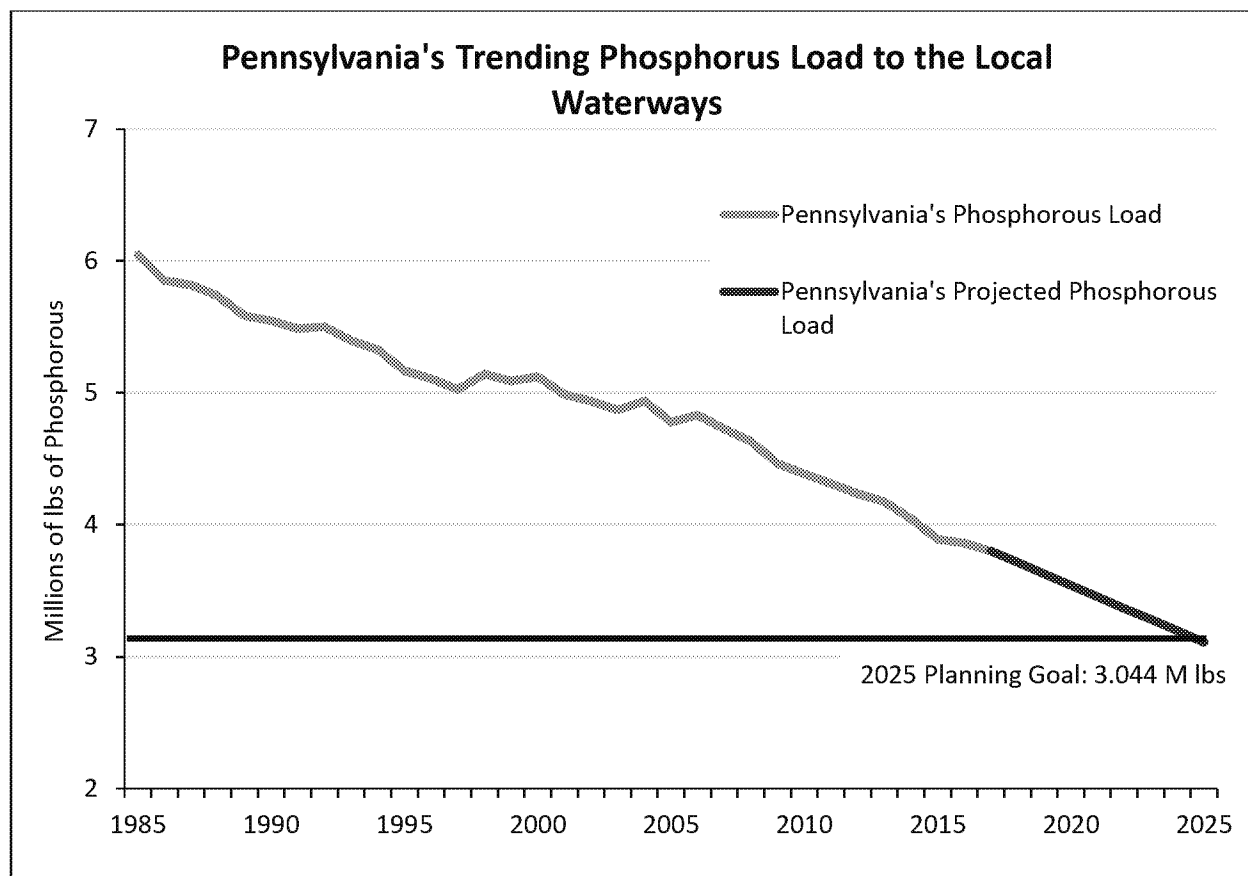


The graph above shows data for phosphorus delivery from Pennsylvania to the Chesapeake Bay between 1985 and 2025. Load numbers from 1985 to 2017 reflect annual load measurements. Load numbers from 2018 to 2025 are model projections based on current/planned actions and future conditions. In 1985, 6.05 M lbs of phosphorus flowed from PA to the Bay. By 2017, this number had decreased by 2.25 M lbs of phosphorus to an annual loading rate of 3.80 M lbs of phosphorus. Current efforts should continue to reduce this number. It is expected that by 2025, Pennsylvania will reduce its annual load of phosphorus to 3.044 M lbs (an additional reduction of 0.756 M lbs of phosphorus).



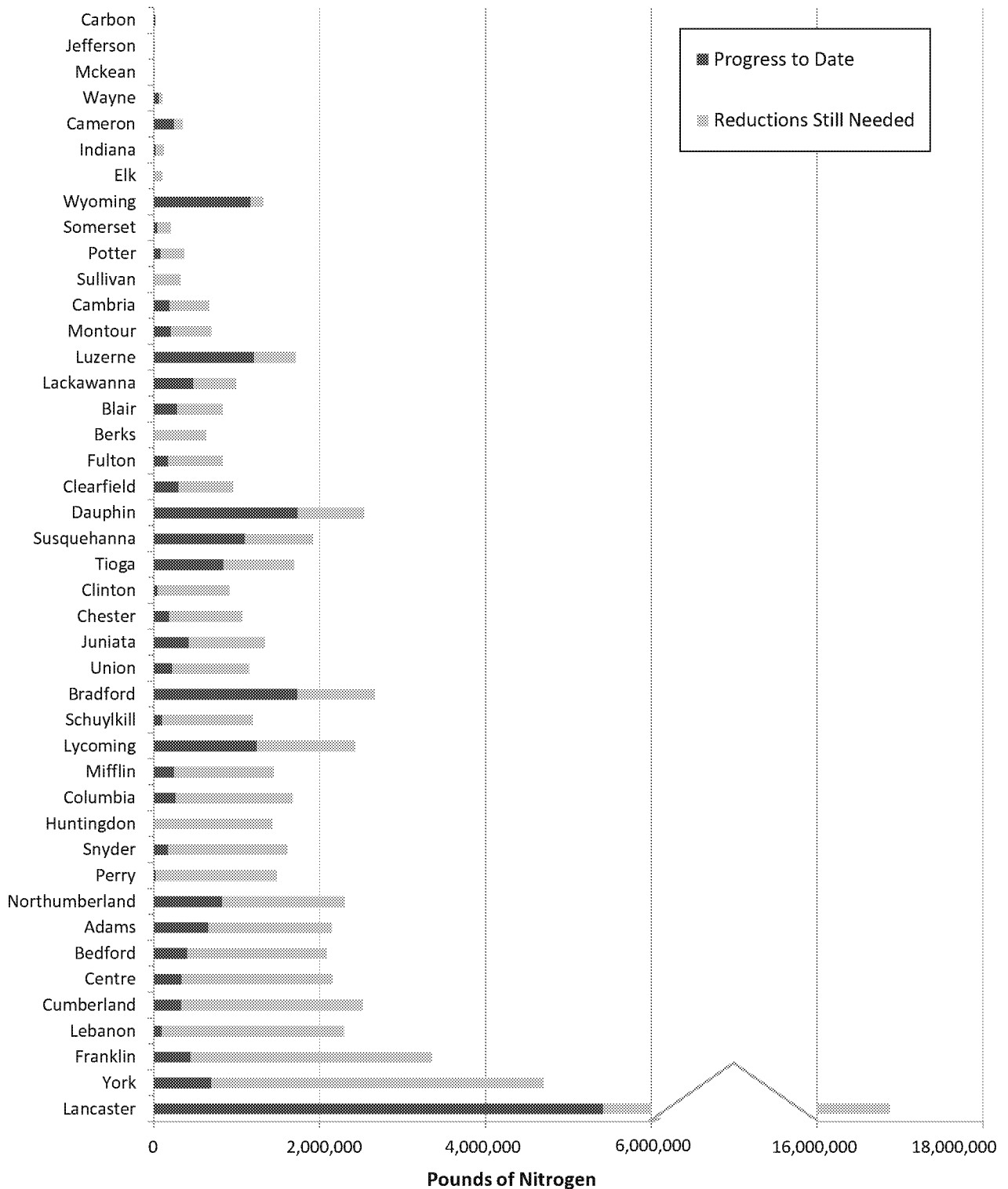
The blue line on the graph above shows nitrogen trend data provided by CAST from 1985 – 2017. The red line shows what future reductions might look like if the average reduction from the last five years (2012 – 2017) continues. This time span experienced aggressive reductions compared to all previous five-year increments.

If Pennsylvania was to continue with existing programs and resources, it would fall short of the 2025 planning goal by 23.63 M lbs of Nitrogen. At the current reduction rate (calculated using the average reduction over the last five years), Pennsylvania would achieve its goal in **2044** (19 years beyond the 2025 planning goal).



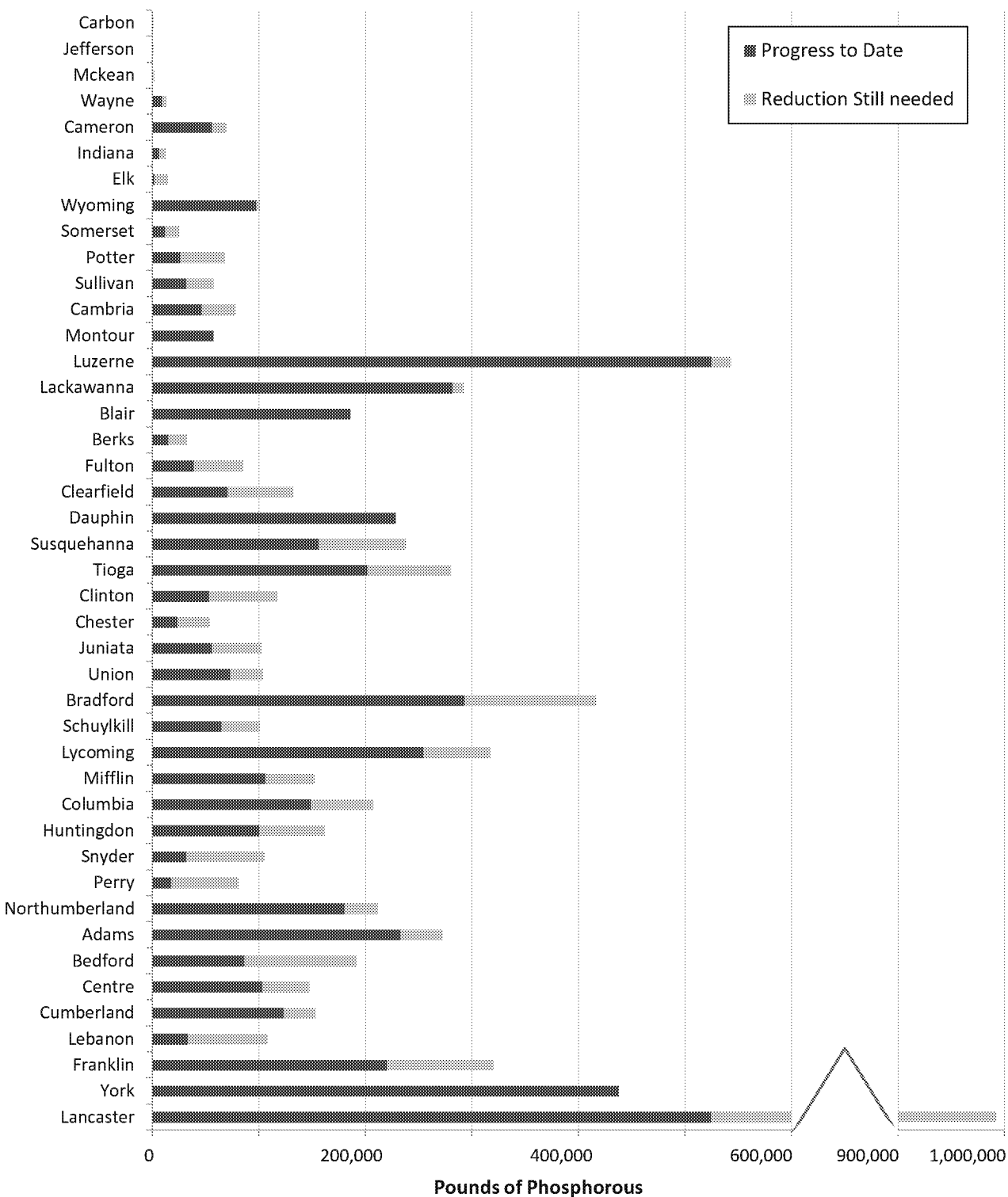
The graph above shows the phosphorus trend data provided by CAST from 1985 – 2017 (blue line). The red line shows what future reductions might look like if the average reduction from the last five years (2012 – 2017) continues. This time span experienced aggressive reductions compared to all previous five-year increments. If this trend continues, Pennsylvania will meet its phosphorus reduction goal by 2025.

## Pounds of Nitrogen from 1985 to 2025



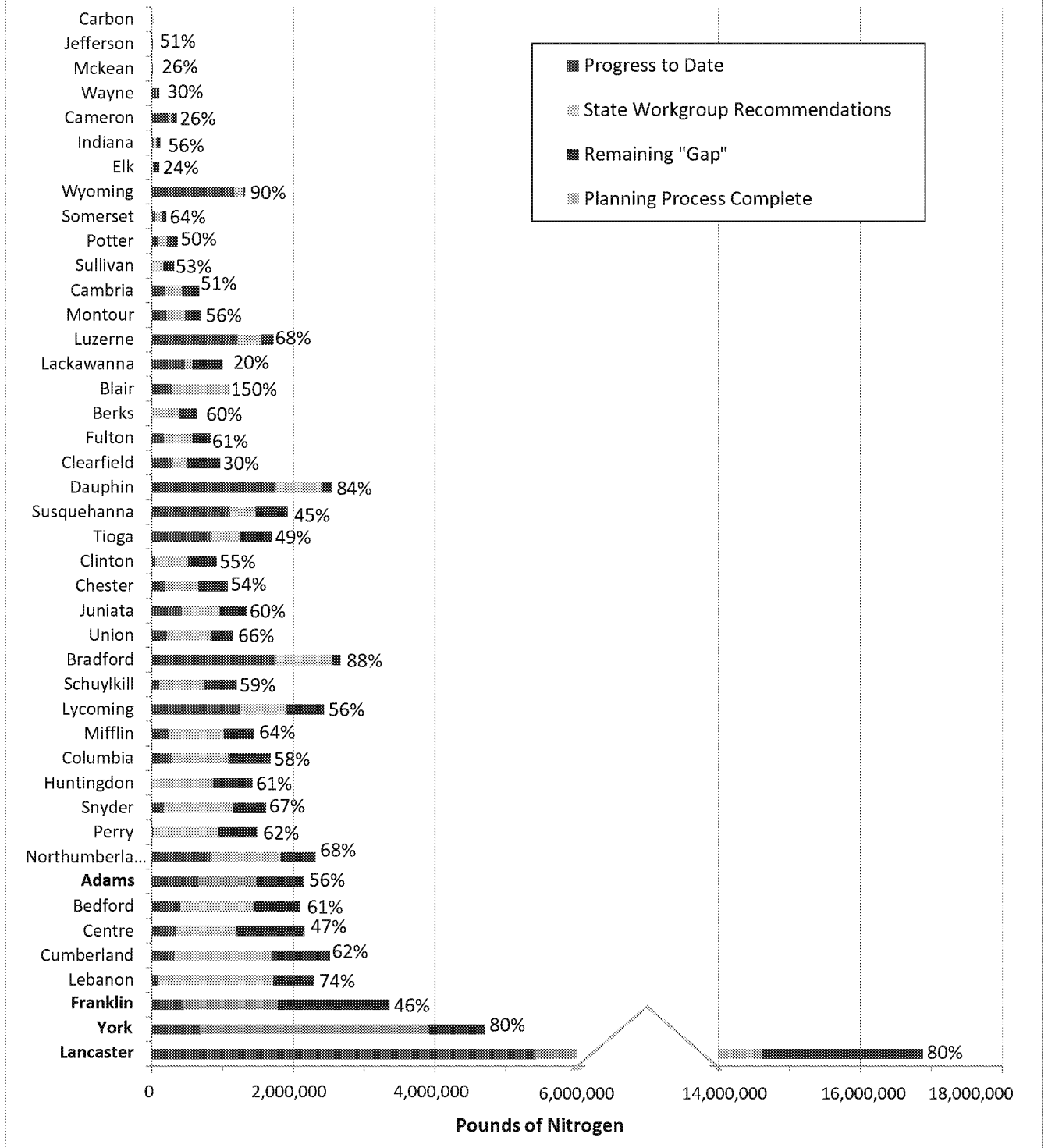
The bar graph above shows nitrogen reduction progress for the 43 PA counties in the Chesapeake Bay watershed. The purple bar represents the progress each county has made in reducing their annual Nitrogen load between 1985 – 2017. The orange bar shows the remaining reductions needed for each county to reach the 2025 planning goal.

## Pounds of Phosphorous from 1985 to 2025



The bar graph above shows phosphorus reduction progress for the 43 counties in the Chesapeake Bay watershed. The purple bar represents the progress each county has made in reducing their annual Phosphorus load between 1985 – 2017. The orange bar shows the remaining reductions needed for each county to reach the 2025 planning goal.

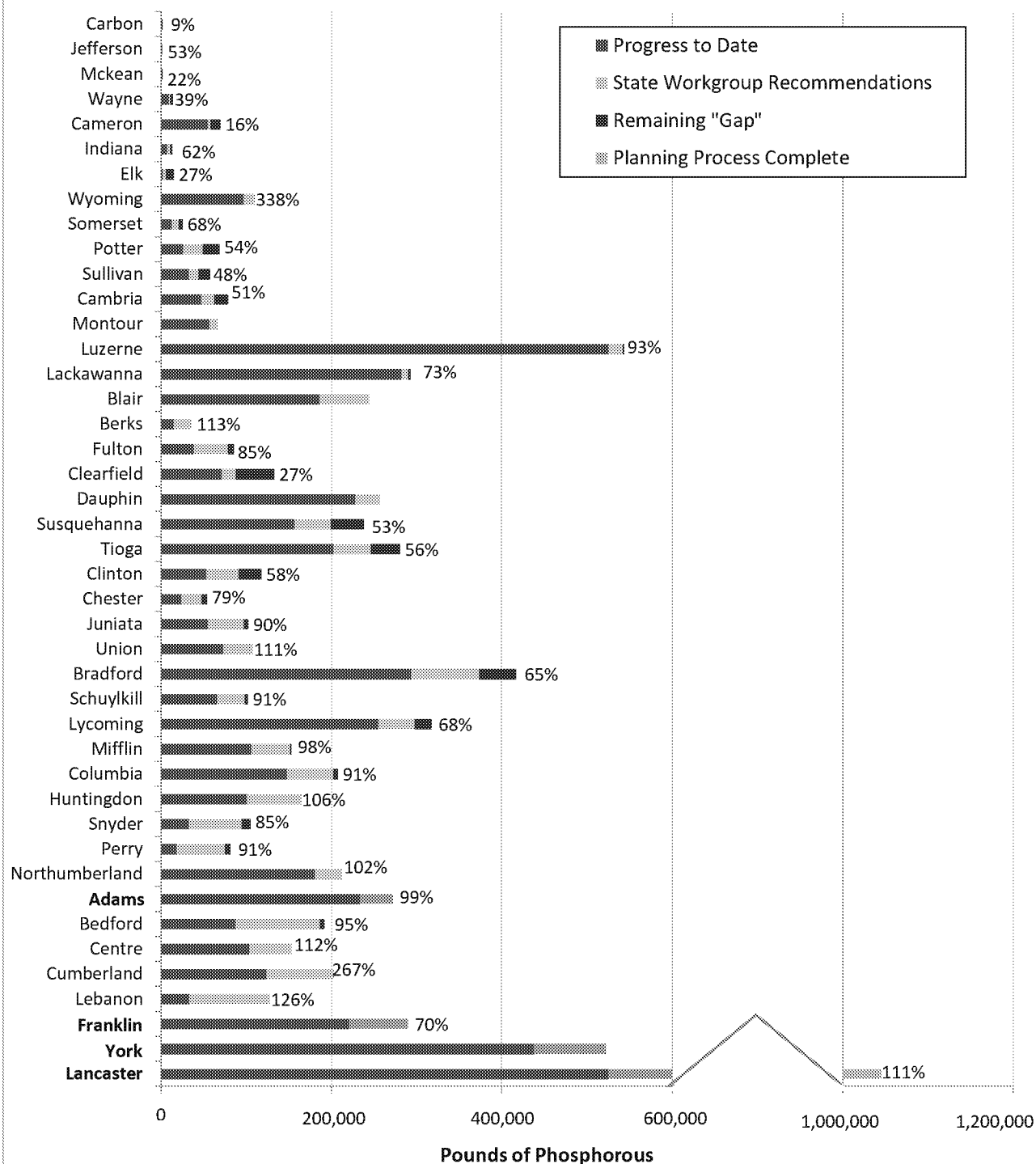
## Nitrogen Reductions Achieved Through 2025



The bar graph above shows nitrogen reduction progress and projected reductions for the 43 PA counties in the Chesapeake Bay watershed. The purple bar shows county progress towards reducing annual nitrogen loads from 1985 – 2017. The green bar shows the reductions from the state WIP workgroup recommendations. The blue bar shows reductions from completed Countywide Action Plans. The percentage achieved represents the total reductions from either a Countywide Action Plan or the state workgroup recommendations compared to the 2025 reduction goal. As counties finish the planning process, reductions will be updated, and the bar will change from green to blue. The red bar shows how much more each county needs to reduce to reach the 2025 planning goal.



## Phosphorous Reductions Achieved Through 2025



The bar graph above shows phosphorus reduction progress and projected reductions for the 43 PA counties in the Chesapeake Bay watershed. The purple bar shows county progress towards reducing annual phosphorus loads from 1985 – 2017. The green bar shows the reductions from the state WIP workgroup recommendations. The blue bar shows reductions from completed Countywide Action Plans. The percentage achieved represents the total reductions from either a Countywide Action Plan or the state workgroup recommendations compared to the 2025 reduction goal. Counties that do not have a percentage have already met their 2025 planning goal as of 2017. As counties finish the planning process, reductions will be updated, and the bar will change from green to blue. The red bar shows how much more each county needs to reduce to reach the 2025 planning goal.

**Pennsylvania Statewide Workgroup Recommendations at the County Scale**  
**Total Nitrogen and Phosphorus Reductions Local Waterways vs. Bay Totals**

County	TN Reduction- Local Waters	% of Local Planning Target - N	TN Reduction- Bay	TP Reduction- Local Waters	% of Local Planning Target - P	TP Reduction- Bay
Lancaster*	9,197,613	80%	5,885,735	521,292	111%	270,438
York*	3,213,027	80%	2,147,355	84,702	Goal Met	32,085
Franklin*	1,326,616	46%	1,108,708	69,653	70%	39,220
Lebanon	1,622,851	74%	1,113,876	93,747	126%	38,870
Cumberland	1,358,404	62%	930,296	78,904	267%	32,248
Centre	844,571	47%	513,366	49,237	112%	13,736
Bedford	1,028,464	61%	548,389	99,639	95%	24,363
Adams*	830,616	56%	518,300	39,284	99%	20,612
Northumberland	1,004,274	68%	739,067	31,982	102%	12,823
Perry	913,082	62%	657,080	56,633	91%	19,197
Snyder	965,004	67%	689,158	62,202	85%	22,565
Huntingdon	864,385	61%	601,679	64,296	106%	20,956
Columbia	814,022	58%	585,015	53,210	91%	20,128
Mifflin	769,213	64%	568,812	44,978	98%	16,353
Lycoming	662,694	56%	449,668	42,896	68%	14,425
Schuylkill	642,856	59%	395,271	32,475	91%	11,731
Bradford	814,839	88%	500,163	79,980	65%	28,325
Union	611,214	66%	452,479	33,892	111%	13,001
Juniata	541,930	60%	393,751	41,459	90%	13,900
Chester	473,022	54%	418,437	23,540	79%	19,607
Clinton	471,758	55%	319,595	37,256	58%	11,814
Tioga	414,958	49%	204,522	43,786	56%	13,599
Susquehanna	360,663	45%	173,799	43,020	53%	13,889
Dauphin	666,692	84%	476,829	28,273	Goal Met	11,010
Clearfield	200,471	30%	108,252	16,794	27%	4,580
Fulton	392,238	61%	307,221	39,255	85%	16,189
Berks	381,826	60%	258,930	19,046	113%	8,245
Blair	805,920	150%	526,559	57,429	Goal Met	24,991
Lackawanna	103,839	20%	45,574	7,490	73%	2,441
Luzerne	340,431	68%	235,211	16,715	93%	5,956
Montour	271,687	56%	187,206	9,393	Goal Met	3,523
Cambria	237,613	51%	114,242	16,193	51%	4,101
Sullivan	164,341	53%	89,579	12,081	48%	3,589
Potter	140,026	50%	69,354	22,571	54%	5,007
Somerset	102,480	64%	87,419	8,455	68%	3,662
Wyoming	138,346	90%	89,763	12,334	338%	4,572
Elk	24,220	24%	11,863	3,261	27%	677
Indiana	55,574	56%	27,153	3,580	62%	622
Cameron	24,947	26%	11,508	2,209	16%	509
Wayne	12,253	30%	4,293	1,608	39%	457
McKean	1,106	26%	369	180	22%	40
Jefferson	1,403	51%	728	55	53%	12
Carbon	312	Goal Met	246	22	9%	11
<b>Total</b>	<b>33,811,798</b>	<b>66%</b>	<b>22,566,820 (66%)</b>	<b>2,005,009</b>	<b>98%</b>	<b>824,079 (109%)</b>

**County\*:** Represents a county that has completed their countywide action plan